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CLAIMS

What is claimed is:

- 1. A heat transfer system comprising a heat exchange component having a heat exchange surface and a non-stick coating applied to the heat exchange surface, the non-stick coating adapted to inhibit adherence of frozen moisture to the heat exchange surface.
- 2. The heat transfer system of claim 1 wherein the heat exchange component comprises fluid transfer tubing.
- 3. The heat transfer system of claim 2 wherein the heat exchange component further comprises heat transfer fins in thermal contact with the fluid transfer tubing.
- 4. The heat transfer system of claim 3 wherein the fluid transfer tubing and heat transfer fins are oriented to promote gravity flow of frozen moisture away from the heat exchange component.
- 5. The heat transfer system of claim 1 further comprising a protective shell positioned around the heat exchange component, the protective shell also having non-stick coating adapted to inhibit the adherence of frozen moisture to the shell.
- 6. The heat transfer system of claim 5 wherein the protective shell is shaped to enhance convection air flows through the shell and around the heat exchange component.

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- 7. The heat transfer system of claim. 6 wherein the protective shell further comprises outwardly flared top and bottom portions.
- 8. The heat transfer system of claim 1 further comprising a fan positioned proximate the heat exchange component.
- 9. The heat transfer system of claim 8 wherein exposed surfaces of the \(\psi\$ fan are coated with a non-stick coating.
- 10. The heat transfer system of claim 1 further comprising a vibrator operatively connected to the heat exchange component to promote release of frozen moisture from the heat exchange surface.
- 11. The heat transfer system of claim 10 wherein exposed surfaces of the vibrator are coated with a non-stick coating.
- 12. The heat transfer system of claim 1 further comprising a base positioned below the heat exchange component, the base sloped downwardly and outwardly to direct frozen moisture accumulations away from the heat exchange component, the base provided with a non-stick coating adapted to inhibit adherence of frozen moisture.
- 13. In a heat exchange system such as an air-source heat pump system, an open loop or closed loop water-source heat pump system, a direct expansion heat pump system, or an evaporative cooling system, the heat exchange system having at least one heat exchange component with exposed heat transfer surfaces, an

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improvement comprising a non-stick coating applied to the exposed heat transfer surfaces.

- 14. A method of inhibiting ice accumulation on exposed heat transfer surfaces of heat exchange components in heat exchange systems comprising coating the heat transfer surfaces with a non-stick material.
- 15. The method of claim 14 wherein the non-stick material comprises PTFE.
- 16. The method of claim 14 wherein the non-stick material comprises fluoropolymer dip coating.
- 17. The method of claim 14 wherein the non-stick material comprises a triazine-dithiol derivative.